



028754-042.ST25

SEQUENCE LISTING

<110> Krueger, Bruce K.
Kingsbury, Tami J.
Bambrick, Linda L.
Dorsey, Susan G.

<120> Novel Treatment of Neurodegenerative Diseases by Altering
Levels of TrkB Isoforms and/or TrkC Isoforms

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Leu	His	Ile	Ala	Ser	Gln	Ile	Ala	Ser	Gly	Met	Val	Tyr	Leu	Ala	Ser
			660					665					670		
Gln	His	Phe	Val	His	Arg	Asp	Leu	Ala	Thr	Arg	Asn	Cys	Leu	Val	Gly
		675					680					685			
Ala	Asn	Leu	Leu	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met	Ser	Arg	Asp	Val
	690					695					700				
Tyr	Ser	Thr	Asp	Tyr	Tyr	Arg	Leu	Phe	Asn	Pro	Ser	Gly	Asn	Asp	Phe
705					710					715					720
Cys	Ile	Trp	Cys	Glu	Val	Gly	Gly	His	Thr	Met	Leu	Pro	Ile	Arg	Trp
				725					730					735	
Met	Pro	Pro	Glu	Ser	Ile	Met	Tyr	Arg	Lys	Phe	Thr	Thr	Glu	Ser	Asp
			740					745					750		
Val	Trp	Ser	Phe	Gly	Val	Ile	Leu	Trp	Glu	Ile	Phe	Thr	Tyr	Gly	Lys
		755					760					765			
Gln	Pro	Trp	Phe	Gln	Leu	Ser	Asn	Thr	Glu	Val	Ile	Glu	Cys	Ile	Thr
	770					775					780				
Gln	Gly	Arg	Val	Leu	Glu	Arg	Pro	Arg	Val	Cys	Pro	Lys	Glu	Val	Tyr
785					790					795					800
Asp	Val	Met	Leu	Gly	Cys	Trp	Gln	Arg	Glu	Pro	Gln	Gln	Arg	Leu	Asn
			805						810					815	
Ile	Lys	Glu	Ile	Tyr	Lys	Ile	Leu	His	Ala	Leu	Gly	Lys	Ala	Thr	Pro
			820					825					830		
Ile	Tyr	Leu	Asp	Ile	Leu	Gly									
			835												

<210> 15

<211> 1030

<212> DNA

<213> Homo sapiens

<300>

<308> NCBI/AJ224536

<309> 2000-11-29

<400> 15

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tcagaagcta caatgatatc tctttataga agttgtagtc ttcaggtctt cagtgaagcta 120

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acagcttttg tttttccaat ggtttatgcc ctaacaatgg caaggaagat ttttaaggaac 180
caaacaccac cacctcctct catctcctca tcatccccgc cttgtcacat tgctttcctc 240
ttgaaaatta gctgaatttt tttgatggga tattagaagc cagaaagagg gtcttgggtc 300
caggattatc tcccaagtca gaagaaacat ccatccaggc ccaggaatga cactctgaat 360
ggcaatgatg ggcaccattt tgagacattc tggccaaga aggaaaatgg gggcaaatat 420
gttaggaaaa gtgcaggaca gagttcatgg tgatggtgaa tctttcttct ctgactctaa 480
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taaaccagct gccactacag gcacagcaga gtgggtacag gagctgagaa acctggattt 600
ctgtttctgg cattgtgcac ttaagaaaaa tactttccca tgttttttgc acttgggggt 660
taatactgac cattaattcc cccatgtctg cctcttctgc cagggtctt ttcaaacata 720
gacaatcatg ggataattaa cttgaaggac aatagagatc atctagtccc atcaactcac 780
tatatatatg aggaacctga ggtccagagt ggggaagtgt cttaccaag gtcacatggt 840
gagttacctc ctttgacgtc tttgtatgca gtaaaagatcc cccccctaac caattttggt 900
tcttaagacc ttaagactca tcaagcctcc atatatattcg tggactgagg tacgactagg 960
tgcccagcac gggatttggt actaaaaaaa tcccttaaat taaaggagtg tcttccaggg 1020
gaggaagcctt                                     1030

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<210> 16
<211> 1113
<212> DNA
<213> Homo sapiens

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<300>
<308> NCBI/AJ224537
<309> 2000-11-29

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<400> 16
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tctatttccc ctctagttt tgatcttctt tgggggtttt ggtttttact ttattttgct 180
tttttctggt ttttttctt tttgtttttt ataggtttca gagaaattat gttgaatcca 240
ataagccttc ccggacattc caagcctctt aacctaggca tctatgttga ggatgtcaat 300
gtttatttca gcaaaggacg tcatggcttt taaaaactcc ttttaagcct ccttgttttg 360
atgtcacctt ggtaggctgg gccctctgag aggttggaag ctctaggcat tgttctcttt 420
ggatccaggg atgctaagta gaaactgcat gagccaccag tgccccggca cctttaaca 480
ccaccagatg ggtgttttcc cccatccacc actggcaggg ttgccccttc cctccaatca 540
tcaactgtgt ccttttttcc cggcctacga ggcagctcct gccactatct ttagagccaa 600
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gctttacaaa aacaacctaa ccatcacaag aaagcctgat gaagtccagc cgtgctccag 720
cctcactttc cctgcttgga agcgtgggt ctccctggct ctcccaggat accatgctgt 780
cctcttagtg acctcgtcgc cctgcaacct ccagtgggga agagtacag agagcaccta 840
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gttaggtctc agaggaaaga atggaaacca atcactttac atttttattt ttattttcgg 960
tggaataatc atcctttttt gggacatact tgccccctac ttctcttct ctctggaacg 1020
gctcacaatg agtgtgacat tagaaaactc cttgcagagg agagtttctc caggctcttc 1080
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```

```

<210> 17
<211> 1089
<212> DNA
<213> Mus musculus

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<220>
<221> misc_feature
<223> Anti-sense RNA complementary to sequences specific
      for mouse TrkB.T1

```


<400> 17

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cggttagcag aggggcaatgg aaagggacaa gattttaatt ccctatatgc atatacccta 60
ccattattta ttctcaggct gtggttaatt caggtccata ctctggcca cacagtccct 120
ggtgctgctc cggtctacct gccgggtgga ctttgaaagc aatcgttagc gaagagtttg 180
ggtctttgct gccagcaaaa caaagaacct actaatgaca ccaccaatgt gcctttaagt 240
ctatcagtcg caggggttgta ggtggaaatc acagaagtta gcaaaggta gagaacagaa 300
gatgttgctg aaatagggtg tatgtgtgga ttagactttt agtgtgcact tagacctagc 360
tatgacttta gatagatgac agatagatag atagatagat agatagatag atagatagat 420
agatgataga taagtaaadc gatgataggt agatagatag atgatagata agtagatcga 480
tgataggtag atagatgata gatagataga tagatagata gatagataga tagatagata 540
gatagataga tagacagaca gatagatatg atagagaggt aggtagatag atgatagaca 600
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gtttttaatt tgcaaatcac ctttaataaaa cagaagcaat taatgtcagc acattttccg 720
tatagtcaaa cagctcgctt ttcattagag aggcataatc caatgagatt tcacttcgat 780
tctatatttg aactattgta agaacagaag gtgaatctaa gtgtgttctt ctgctgcttc 840
tcagctgcct gaccctgcc tctgccttgg ggttccccag tcacagctca caacaagcag 900
gctgcagaca tcctcggaga ttaccattt ccaccagaca ccctcaaata agcagcactt 960
cctgggatag gcaacagcag tcccagagtt cagctcacag ggcgtcaggc aacaagcacc 1020
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```

<210> 18

<211> 20

<212> RNA

<213> Mus musculus

<220>

<221> misc_feature

<223> Anti-sense RNA for mouse TrkB.T1

<400> 18

aagcaggcug cagacauccu

20

<210> 19

<211> 359

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Anti-sense RNA specific for human TrkB.T1

<400> 19

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agagaagtac aatccaatgg gatttcattt cagttttgta tttgaactac tgtaagaaga 60
gaagcattaa tttacatgt tttcttgagg tgctgcttag ctgcctgaga gttacctctg 120
cattggtggt cccaatcac agctcacagt atatgcaggc ttcatatagt acagcctcca 180
aacaccgccc acatctacca gaaaaccca gataagcagc acttcccggg ataagccaac 240
agcagtccca ggagtccagc ttacatggca gcatcaacca acaagcacca cagccccctt 300
ctctgtcttt tcctttatct cagctacca tccagtggga tcttatgaaa caaaacaaa 359

```

<210> 20

<211> 296

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Anti-sense RNA complementary to Exon 19 of Human TrkB.Shc

<400> 20

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ctccatcttg ccatacctgat tgatcgagga gatgggtcta tagttaaagt ggcatagtac 60
tttgaggggt tagtcattag agcacactgc tttgtcttgg aaaggcaact tcttgcttgg 120
ctagggttatg gaagctaagg agtgacgtca agatgttgtc tggccagaat ttgcagataa 180
ccatagaact cttctcctcc atcaggcatg gatttagcct cctttagtgc ctgcagtgac 240
acaggagcct ccaaatacca aattattatc aggcgggtctt gggggaacct ctgggc 296
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<210> 21

<211> 1030

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Anti-sense RNA complementary to human truncated TrkC exon 13B

<400> 21

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gtgctgggca cctagtcgta cctcagtcca cgaaatatat ggaggcttga tgagtcttaa 120
ggctcttaaga accaaaattg gttaggggag ggatctttac tgcatacaaa gacgtcaaag 180
gaggtaactc accatgtgac cttgggtaag acacttcccc actctggacc tcaggttcct 240
catatatata gtgagttgat gggactagat gatctctatt gtccttcaag tttaatatcc 300
catgattgtc tatgtttgaa aagacccctg gcagaagagg cagacatggg ggaattaatg 360
gtcagtatta aacccaagt gcaaaaaaca tgggaaagta ttttcttaa gtgcacaatg 420
ccagaaacag aaatccagggt ttctcagctc ctgtacccac tctgctgtgc ctgtagtggc 480
agctggttta ttttacgcat aaaatctaga tctaagaat ctaccctgg cattatagaa 540
atggcacaag ttagagtcag agaagaaaga ttcacatca ccatgaactc tgtcctgcac 600
tttccctaac atatttgccc ccattttcct tcttggacca gaatgtctca aaatggtgcc 660
catcattgcc attcagagtg tcattcctgg gcctggatgg atgtttcttc tgacttggga 720
gataatcctg gacccaagac cctctttctg gcttctaata tcccatcaaa aaaattcagc 780
taattttcaa gaggaaagca atgtgacaag gcggggatga tgaggagatg agaggaggtg 840
gtggtgtttg gttccttaaa atcttccttg ccattgttag ggcataaacc attggaaaaa 900
ccaaagctgt tagctcactg aagacctgaa gactacaact tctataaaga gatatcattg 960
tagcttctga ggatgaaatc tcctttggag accatgcagc atttgtgggc cctggaaaga 1020
tccgtgtcgg 1030
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<210> 22

<211> 1113

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Anti-sense RNA complementary to human truncated TrkC exon 14B

<400> 22

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aaggagtttt ctaatgtcac actcattgtg agccgttcca gagagaagag gaagtagggg 120
gcaagtatgt cccaaaaaag gatgattttt ccaccgaaaa taaaaataaa aatgtaaagt 180
gattggtttc cattctttcc tctgagacct aacttggtgc caatacttga gcctggctcc 240
ccctcctctt accgcgccgt ctccacctct gcttaggtgc tctctgtgac tcttccccac 300
tggaggttgc agggcgacga ggtcactaag aggacagcat ggtatcctgg gagagccagg 360
```

```

gagacccac gcttccaagc agggaaagtg aggctggagc acggctggac ttcatacaggc 420
tttcttgatg tgggttaggt gtttttgtaa agcaagagaa tggctagtgt atttaaaaga 480
tgctcctggt gcacagggtt ttaattctct ttattggctc taaagatagt ggcaggagct 540
gcctcgtagg ccgggaaaaa aggagcacag tgatgattgg agggaaagggg caaccctgcc 600
agtggtaggt gggggaaaac acccatctgg tgggtgttaa gggtgccggg gcaactgggtg 660
ctcatgcagt ttctacttag catccctgga tccaaagaga acaatgccta gagcttccaa 720
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ttaaagacca tgacgtcctt tgctgaaata aacattgaca tcctcaacat agatgccatg 840
gttaagaggc ttggaatgtc cgggaaggct tattggattc aacataattt ctctgaaacc 900
tataaaaaac aaaaagaaaa aaaaacagaa aaaagcaaaa taaagtaaaa accaaaacc 960
ccaaagaaga tcaaaactag gaggggaaat agagagggag cttgaaaggg gaagaactgt 1020
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tggaacact ccattttgct gcagcctcca ctg 1113

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